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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/355,601 07/30/99 KINNING

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EXAMINER

IM52/0727

LISA M MCGEEHAN
3M INNOVATIVE PROPERTIES COMPANY
PO BOX 33427
ST PAUL MN 55133-3427

YOUNG, T

ART UNIT

PAPER NUMBER

1714

DATE MAILED:

07/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/355,601

Applicant(s)

Kinning et al

Examiner

T. Yoon

Group Art Unit

1714

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 9-30-99, Pre Amst.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-37 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-37 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☒ All ☐ Some* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____
- ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 263
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-21, 26-28 and 31-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited value of a peel adhesion based on an amount of a general tackifier is indefinite in not specifying a particular tackifier and amount thereof since different tackifiers and amount thereof such as MQ silicate resin, terpene phenolic or hydrocarbon tackifier inherently would yield different values of a peel adhesion in the mixture with a polyurea-based polymer. Seth et al (US 5,866,222) teaches that the peel adhesion is a function of the amount of a tackifier at col. 10, lines 60-67.

Claims 1-21, 26-28 and 31-35 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The instantly recited "--- wherein the polyurea-based polymer does not require greater than about 45 parts by weight tackifier ---" in claim 1 encompasses a composition without said tackifier. The instant examples 1-3 show such composition, however, the example 1 does not

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yield the recited peel adhesion value greater than about 10.0N/dm. Thus, the specification fails to teach adequately how to control the reaction in order to obtain such (claimed) polyurea-based polymer or what structural or process limitation control the claimed property (peel adhesion and shear strength) since said examples show random results of peel adhesion and shear strength.

Claims 31 and 35 recite the addition of the tackifier to the polyurea-based polymer. Claim 35 further recites that said polyurea-based polymer is polymerized on-web. However, the specification does not teach how to add said tackifier to the polyurea-based polymer on-web.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-17, 22, 23 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims recite "mole fraction of linkages between segments in a backbone of the polymer", however, it is unclear what constitutes said segment(S) since it can be blocks or particular functional groups.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-17, 19-31, 33, 34, 36 and 37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0 380 236 or Leir et al (US 5,214,119 or 5,461,134).

The cited prior art are substantially same, and the examiner points out EP.

EP teaches the instant organopolysiloxane-polyurea block copolymers (formula I) and adhesives thereof at page 3 and in examples 21-24. Lines 8-44 of page 9 show films, release material coated tapes, % segment contents and hot melt extrusion coating processes. Said formula I with an alkylene oxide as B, $n = 70$ and $m = 25$ meets the instant polyurea-based polymer. The instant Formula I of claim 5 shows "a" and "m", however, said Formula I could have only "m" regardless of the value of "a" since the repeating units of "a" and "m (with $a=0$)"

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are the same since "B" can be an alkylene oxide of Y. Another words, B and Y can be the same. Also, the instantly recited properties are inherent, and applicant has a burden of showing otherwise.

Thus, the instant invention lack novelty.

Claims 1-31, 33, 34, 36 and 37 are under 35 U.S.C. 103(a) as obvious over EP 0 380 236 or Leir et al (US 5,214,119 or 5,461,134), or in view of WO 98/13135.

The instant invention further recites up to 45 parts by weight of tackifier and an acid-containing polymer. WO teaches an adhesive composition comprising said acid-containing polymer.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to utilize up to 45 parts by weight of tackifier in EP or Leir et al since the amount of tackifier used in an adhesive composition is dependent on the desired final property such as peel adhesion, or further to employ an acid-containing polymer of WO in EP or Leir et al since adhesives comprising blends of adhesives are routine in the art.

Claims 1-17, 19-26, 29-31, 33, 34, 36 and 37 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Seth et al (US 5,866,222).

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Seth et al are discussed by applicant at the bridging pp on pages 3-4 of the instant specification wherein polyurea-based polymers used in release materials are stated. See col. 3, lines 36-42, col. 4, line 49 to col. 5, line 67, col. 7, lines 11-12 and table I. However, said release materials or PSA are dependent on the desired peel adhesion. Seth et al teach that a polyurea-based polymer containing 5-40 % of MQ tackifier yields peel adhesion of 10.4-14.5 N/dm in table I which meets the instant invention. Thus, the same peel adhesion is called differently, PSA in the instant invention and release materials in Seth et al. Also, the instantly recited properties are inherent, and applicant has a burden of showing otherwise.

Thus, the instant invention lack novelty.

Claims 1-31, 33, 34, 36 and 37 are rejected under 35 U.S.C. 103(a) as obvious over Seth et al (US 5,866,222), or in view of WO 98/13135.

The instant invention further recites a backing comprising a polyurea and an acid-containing polymer. However, Seth et al teach that the base web can be any material at col. 7, lines 34-37. WO teaches an adhesive composition comprising said acid-containing polymer.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to utilize a backing comprising a polyurea in Seth et al since Seth et al teach film or tape made of the polyurea-based polymers at col. 3, lines 36-42 and the base web of any material, and further to employ an acid-containing polymer of WO in Seth et al since adhesives comprising blends of adhesives are routine in the art.

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Claims 1-17, 19-34, 36 and 37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 96/35458.

WO teaches the instant adhesive composition, process of making thereof and applications at lines 20-21 of page 5 (hot melt, PSA), abstract, lines 5-15 and 26-31 of page 6 and pages 25 - 30 (various substrates, tapes, release coating) and lines 13-16 of page 8 and lines 7-22 of page 21 (extrusion reaction of polyamines and polyisocyanates). Polyurea backing is taught at line 1 of page 28. Tables 1-5 show the instant peel strength and shear strength. The adhesive composition of WO inherently yields the instant properties under the recited testing method.

Thus, the instant invention lacks novelty.

Claims 1-37 are rejected under 35 U.S.C. 103(a) as obvious over WO 96/35458 in view of WO 98/13135 or Wright et al (US 6,224,949 B1).

The instant invention further recites an acid-containing polymer and polymerization on web. WO'135 teaches an adhesive composition comprising said acid-containing polymer. Wright et al teach polymerization on various substrates at col. 11, lines 32-53. Web is seen at col. 18, line 40.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to utilize an acid-containing polymer of WO'135 in WO'458 since adhesives comprising blends of adhesives are routine in the art, or to polymerize reactants on web in WO'458 by teaching of Wright et al since WO'458 teaches various substrates including webs since many PSA

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tapes or films contain webbing and since a direct polymerization on the substrate in order to improve processing is routine in the art as evidenced by Wright et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Monday to Thursday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

THY/July 26, 2001


TAE H. YOON
PRIMARY EXAMINER